



5A

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/937,009
Source: Pat/09
Date Processed by STIC: 5/15/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
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4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 09/437076
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 _____ Wrapped Nucleics _____ Wrapped Aminos	The number text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 _____ Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 _____ Misaligned Amino _____ Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 _____ Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 _____ Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 _____ PatentIn 2.0 _____ "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 _____ Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (i) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (ii) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (iii) SEQUENCE DESCRIPTION SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 _____ Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 _____ Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 _____ Invalid <213> _____ Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 _____ Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 _____ PatentIn 2.0 _____ "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 _____ Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide	



PCT09

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/937,009

DATE: 09/15/2002
 TIME: 15:11:14

Input Set : A:\P22517PC.txt
 Output Set: N:\CRF3\05152002\I937009.raw

Sequence(s) identified
 (20050100) (20050100) (20050100)

3 <110> APPLICANT: Alessi, Dario
 4 Palendiran, Anudharan
 5 Bork, Maria
 6 Charlie, Richard
 7 Downes, Peter
 8 Casamayor, Antonio
 10 <120> TITLE OF INVENTION: Enzyme
 12 <130> FILE REFERENCE: 002.00170
 15 <140> CURRENT APPLICATION NUMBER: 09/937,009
 17 <141> CURRENT FILING DATE: 2000-03-17
 20 <150> PRIOR APPLICATION NUMBER: PCT/GB00/01004
 22 <151> PRIOR FILING DATE: 2000-03-17
 25 <160> NUMBER OF SEQ ID NOS: 21
 29 <170> SOFTWARE: PatentIn Ver. 2.0
 33 <210> SEQ ID NO: 1
 35 <211> LENGTH: 24
 37 <212> TYPE: PRT
 39 <213> ORGANISM: Artificial Sequence
 43 <220> FEATURE:
 45 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide
 49 <400> SEQUENCE: 1
 51 Arg Glu Pro Arg Ile Leu Ser Glu Glu Glu Glu Met Phe Arg Asp
 53 1 5 10 15
 57 Phe Asp Tyr Ile Ala Asp Trp Cys
 59 20
 63 <210> SEQ ID NO: 2
 65 <211> LENGTH: 24
 67 <212> TYPE: PRT
 69 <213> ORGANISM: Artificial Sequence
 73 <220> FEATURE:
 75 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide
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 83 1 5 10 15
 87 Phe Asp Tyr Ile Ala Asp Trp Cys
 89 20
 93 <210> SEQ ID NO: 3
 95 <211> LENGTH: 24
 97 <212> TYPE: PRT
 99 <213> ORGANISM: Artificial Sequence
 103 <220> FEATURE:
 105 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide
 109 <400> SEQUENCE: 3
 111 Arg Glu Pro Arg Ile Leu Ser Glu Glu Glu Glu Met Phe Arg Asp
 113 1 5 10 15
 117 Phe Asp Tyr Ile Ala Asp Trp Cys
 119 20

(global env)

insufficient
 explanation

(give source)

general material
 description

in form

form

form

PATENT APPLICATION NO. US/09/937,009

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971).

1. *Journal of the American Medical Association*, 1997; 277: 1033-1038.

INVEST. 500 : A:\P22517PC.txt

File Path : N:\CRF3\05152002\I937009.raw

263 <210> SEQ ID NO: 8
265 <211> LENGTH: 11
267 <212> TYPE: PRP
269 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
275 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
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281 Pro His Phe Pro Glr Phe Ser Thr Ser Ala Ser
283 1 5 10
289 <210> SEQ ID NO: 9
291 <211> LENGTH: 9
293 <212> TYPE: PRP
295 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
301 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
305 <400> SEQUENCE: 9
307 Thr Phe Cys Gly Thr Pro Glu Phe Leu
309 1 5
315 <210> SEQ ID NO: 10
317 <211> LENGTH: 9
319 <212> TYPE: PRP
321 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
327 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
331 <400> SEQUENCE: 10
333 Phe Glu Gly Phe Glu Tyr
335 1 5
341 <210> SEQ ID NO: 11
343 <211> LENGTH: 13
345 <212> TYPE: PRP
347 <213> ORGANISM: Artificial Sequence
351 <220> FEATURE:
353 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
357 <400> SEQUENCE: 11
359 Arg Gln Arg Tyr Gln Ser His Pro Asp Ala Ala Val Gln
361 1 5 10
367 <210> SEQ ID NO: 12
369 <211> LENGTH: 13
371 <212> TYPE: PRP
373 <213> ORGANISM: Artificial Sequence
377 <220> FEATURE:
379 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
383 <400> SEQUENCE: 12
385 Met Asn Lys Thr Thr Thr and Thr
387 1 5 10
393 <210> SEQ ID NO: 13
395 <211> LENGTH: 13
397 <212> TYPE: PRP
399 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

P1937009.1 US/09/937,009

Date: 03/13/2009

Time: 10:44:41

Input File: A:\P22517PC.txt

Output File: N:\CRF3\03152002\I937009.raw

>>> 1.1.1.1

101 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide

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105 Arg Pro Ala Ile Ala Ala Pro

107 1 3

115 <210> SEQ ID NO: 14

117 <211> LENGTH: 77

119 <212> TYPE: PRT

121 <213> ORGANISM: Artificial Sequence

125 <220> FEATURE:

127 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide

131 <400> SEQUENCE: 11

133 Ala Asp Val Lys Lys His Leu Phe Ile Arg Ile Ile Asp Tyr Ser Ala

435 1 5 10 15

439 Leu Met Asp Lys Lys Val Lys Pro Pro Phe Ile Pro Thr Ile Arg Gly

441 20 25 30

445 Arg Glu Asp Val Ser Asn Phe Asp Asp Ile Phe Thr Ser Glu Ala Pro

447 35 40 45

451 Ile Leu Thr Pro Pro Arg Glu Pro Arg Ile Leu Ser Glu Glu Glu Glu

453 50 55 60

457 Glu Met Phe Arg Asp Phe Asp Tyr Ile Ala Asp Trp Lys

459 65 70 75

465 <210> SEQ ID NO: 15

467 <211> LENGTH: 77

469 <212> TYPE: PRT

471 <213> ORGANISM: Artificial Sequence

475 <220> FEATURE:

477 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide

481 <400> SEQUENCE: 15

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485 1 5 10 15

489 Leu Leu Ala Arg Arg Leu Pro Pro Pro Phe Val Pro Thr Leu Ser Gly

491 20 25 30

495 Arg Thr Asp Val Ser Asn Phe Asp Glu Glu Phe Thr Gly Glu Ala Pro

497 35 40 45

501 Thr Leu Ser Pro Pro Arg Asp Ala Arg Pro Leu Thr Ala Ala Glu Glu

503 50 55 60

507 Ala Ala Phe Leu Asp Phe Asp Phe Val Ala Gly Glu Lys

509 1 3

515 <210> SEQ ID NO: 16

517 <211> LENGTH: 9

519 <212> TYPE: PRT

521 <213> ORGANISM: Artificial Sequence

525 <220> FEATURE:

527 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide

531 <400> SEQUENCE: 16

533 Ala Thr Leu Glu Glu His Arg Leu Thr Thr Thr Thr Thr Thr Thr Thr

535 1 3 5 7 9

539 Val Thr Ala Lys Lys Leu Ser Ile Thr Thr Thr Thr Thr Thr Thr Thr

541 11 13 15

RAW SEQUENCE LISTING

PATENT APPLICATION NO. US 09/937,009

DATE: 07/17/02

TIME: 14:14:17

Input Seq: A:\P22517PC.txt

Output Seq: N:\CPFF3\05152002\I937009.raw

545 Met Thr Asp Thr Arg Tyr Phe Asp Glu Gln Phe Thr Ala Gln Met Ile
547 35 40 45
551 Thr Ile Thr Pro Pro Asp Gln Asp Asp Ser Met Gln Lys Val Asp Ser
553 5 10 15 20 25 30
557 Glu Arg Arg Pro His Phe Pro Gln Phe Ser Tyr Ser Ala Ser Thr Ala
559 35 70 75 80

561 <210> SEQ ID NO: 17

573 <211> LENGTH: 75

575 <212> TYPE: PRT

577 <213> ORGANISM: Artificial Sequence

581 <220> FEATURE

583 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide

587 <400> SEQUENCE: 17

589 Gly Glu Val Gln Ala His Pro Phe Phe Arg His Ile Asn Trp Glu Glu
591 1 5 10 15
595 Leu Leu Ala Arg Lys Val Glu Pro Pro Phe Lys Pro Leu Leu Gln Ser
597 20 25 30
601 Glu Glu Asp Val Ser Gln Phe Asp Ser Lys Phe Thr Arg Gln Thr Pro
603 35 40 45
607 Val Asp Ser Pro Asp Asp Ser Thr Leu Ser Glu Ser Ala Asn Gln Val
609 50 55 60
613 Phe Leu Gly Phe Thr Tyr Val Ala Pro Ser Val
615 65 70 75

621 <210> SEQ ID NO: 18

623 <211> LENGTH: 82

625 <212> TYPE: PRT

627 <213> ORGANISM: Artificial Sequence

631 <220> FEATURE

633 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide

637 <400> SEQUENCE: 18

639 Met Glu Ile Lys Ser His Val Phe Phe Ser Leu Ile Asn Trp Asp Asp
641 1 5 10 15
645 Leu Ile Asn Lys Lys Ile Thr Pro Pro Phe Asn Pro Asn Val Ser Gly
647 20 25 30
651 Pro Asn Glu Leu Arg His Phe Asp Pro Glu Phe Thr Glu Glu Pro Val
653 35 40 45
657 Pro Asn Ser Ile Gly Lys Ser Pro Asp Ser Val Leu Val Thr Ala Ser
659 50 55 60
663 Val Tyr Glu Ala Ala Gln Ala Phe Leu Gly Phe Ser Tyr Ala Pro Pro
665 65 70 75

667 <210> SEQ ID NO: 19

679 <211> LENGTH: 76

681 <212> TYPE: PRT

683 <213> ORGANISM: Artificial Sequence

687 <220> FEATURE

689 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide

693 <400> SEQUENCE: 19

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/937,009

DATE: 05/15/2002

TIME: 10:10:10

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